

**Notification of Self-Implementing On-Site Cleanup and Disposal of
PCB Remediation Waste and Request for
Waiver of 30-Day Notification**

Cleaning of air Handling Systems, Ductwork and Surfaces
PROJECT NAME
ADDRESS

Prepared for:

NAME
COMPANY
ADDRESS
ADDRESS

Prepared by:



ENVIRONMENTAL, LLC

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P.O. Box 423
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DATE

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1.0 INTRODUCTION

On behalf of the Town of Fairfield Board Of Education, AMC Environmental, LLC (AMC) has prepared this Notification of Self-Implementing On-Site Cleanup and Disposal of PCB Remediation Waste and Request for Waiver of 30-Day Notification for Cleaning of Air Handling Systems, Ductwork and Surfaces at Osborne Hill School (OHS).

2.0 BACKGROUND

AMC was retained by the Fairfield School System to perform indoor air sampling and other environmental testing for polychlorinated biphenyls (PCBs) in the interior of Osborne Hill School (OHS) located at 760 Stillson Street in Fairfield, CT. (see figure 1). Up to this point, AMC had acted in an advisory capacity for other air monitoring activities by another consultant at the newly constructed NAME, but was retained for the NAME of SCHOOL sampling when scope and scale of the NAME of SCHOOL sampling effort required additional technical and equipment resources.

AMC performed the required air monitoring work in accordance with the draft Indoor PCB Sampling Plan (Plan) prepared on an expedited basis and submitted to Ms. Kimberly Tisa, PCB Coordinator for United States Environmental Protection Agency (EPA) Region 1 on DATE for review and comment. Sampling was initiated on DATE and completed on DATE. The results of this work were presented at a public meeting held on DATE and are documented in detail in AMC's DATE and NAME of REPORT.

AMC concluded the following:

- The results of laboratory analysis of air samples collected from SCHOOL air ranged from 0.000 micrograms per cubic meter (ug/m^3) to $0.00 \text{ ug}/\text{m}^3$, with one results in excess of the Acceptable Long-Term Average Exposure Concentration of $0.3 \text{ ug}/\text{m}^3$. The detected $0.31 \text{ ug}/\text{m}^3$ concentration does not correspond to a risk that exceeds any Connecticut Department of Environmental Protection (CTDEP) benchmark.
- A one-time result in excess of Acceptable Long-Term Average Exposure Concentration does not constitute an immediate hazard to current occupants. The Acceptable Long-Term Average Exposure Concentration ($0.3 \text{ ug}/\text{m}^3$) represents a long-term risk level based on 25 years of daily work place exposure. CTDEP's risk benchmarks will not be exceeded by a single or even multiple detected concentrations that are higher than $0.3 \text{ ug}/\text{mg}^3$ provided the long-term average is at or below this concentration.
- Building materials are an important, although not necessarily exclusive, source of the PCB in the indoor air at SCHOOL NAME. Sampling data suggests that dust in vents and caulking materials are important contributors. Other potentially significant contributors are tile and baseboard mastics. Miscellaneous sources

are also present (hydraulic oil, few remaining ballasts, etc). Local and regional PCB contamination is also a factor likely contributing to indoor air levels.

- Airborne PCB concentrations detected in SCHOOL are similar to other schools and public buildings based on AMC's review of other available data. This SCHOOL data agree with prior published data that highlight a global issue with PCBs in indoor air directly attributable to PCB contaminated building materials.

AMC's data suggest that PCB-contaminated dust, especially in the ventilation systems, is an important contributor to the levels of PCBs found in indoor air. Data have shown that the dust deposition inside ducts could contain PCBs up to 26 parts per million ("ppm"), with an average ventilation dust PCB concentration of 6.7 ppm. As outlined in AMC's DATE presentation of recent SCHOOL air, bulk and wipe PCB results, there are a number of initial remedies that could be implemented over time. The removal of this deposited material in the ventilation system and in areas of long-standing dust accumulation as described herein as expected to improve the indoor air quality of the school and reduce airborne PCB concentrations as a first step in the remediation of the PCB indoor air contamination of OHS.

3.0 APPLICABILITY AND WAIVER REQUEST

The available data suggests that the source of PCBs detected in the indoor air of OHS originates from pre-1978 building materials (the school was built in the late 19xx and early 19xx) and source concentrations range from less than 50 ppm total PCBs up to , with the primary sources consisting of PCB containing building materials. .

While lines of evidence strongly indicate that Toxic Substances Control Act (TSCA) regulations regarding PCB cleanup (specifically, 40 CFR Part 761) may not apply, the possibility exists that PCB contaminant concentrations could be encountered in the course of performing this first stage of remediation. Given the significant logistical and schedule constraints inherent in performing this work, the City has conservatively opted to pursue Self-Implementing On-Site Cleanup and Disposal of PCB Remediation Waste consistent with 40 CFR Part 761.61(a).

In addition, the City requests a waiver to the 30-day notification requirement to facilitate implementation of the initial remedy during OHS summer vacation schedule. A bid package was prepared and contractors were allowed to visit the site in order to provide proposals to conduct the remediation. The City is in the process of selecting one of the contractors to complete this work and would like to initiate this work as soon as a selected remediation firm is under contract. This work is expected to take most of the summer to complete and time is of the essence in order to have the school ready for the fall semester.

4.0 CHARACTERIZATION

As documented in **AMC's DATE OF REPORT**, AMC's data suggest that PCB-contaminated dust, especially in the ventilation systems, is an important contributor to the levels of PCBs found in indoor air. Characterization of **SCHOOL** indoor air, bulk materials and wipe sampling was conducted in **cooperation with EPA and with direct EPA oversight in DATE**. The following summarizes the extensive sampling conducted at SCHOOL by AMC:

Number of samples (xx) Indoor Air Samples for PCBs using low-volume air sampling techniques:

- # area sample
- # area samples

Number of samples (xx) background air sample locations for PCBs using high-volume sampling techniques:

- Area
- Area

Number of samples (xx) bulk samples various building materials for PCB analysis:

- # material samples
- # material samples
- # material samples

Number of samples (xx) wipe samples of various building materials:

- # area wipe
- # area wipe
- # area wipe
- # area wipe

Please refer to Appendix A, which contains a complete copy of AMC's Report of Findings, for additional details.

5.0 REMEDIAL APPROACH

AMC's remedial approach for this first phase of work consists of the following:

- Ducts: The cleaning of all supply, return and supply exhaust ducts in the school (approximately xxx feet of duct work of varying cross-sectional area).
- HVAC Components: The cleaning of an estimated xx central HVAC components, fans, coils and intakes.

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- Perimeter uninvent and corridor heaters: The cleaning of units and replacement of filters of an estimated xx units.
 - Return exhaust vents: The cleaning of an estimated xx return air exhaust vents (the approximate linear footage of return air vents is xxxx feet).
 - Surface cleaning: The cleaning of exposed horizontal surfaces with visible dust accumulation but primarily surfaces 8-feet above the floor level that are not routinely cleaned. This applies to areas where dirt has accumulated and was not cleaned as part of the normal maintenance of the school. An initial estimate of the area subject to cleaning is approximately xx,xxx square feet (ft²). The school is also asking for a separate cost item to clean the enclosed spaces under the lockers which are difficult to access. The school has approximately x,xxx hallway lockers included under this separate cost item.

To accomplish this work, AMC prepared comprehensive bid specifications consistent with applicable State of Connecticut public bidding rules to secure the services of an appropriately qualified contractor. The ventilation system will be cleaned using source removal mechanical cleaning methods designed to extract contaminants from within the system and safely remove contaminants from the facility. It is the contractor's responsibility to select Source Removal methods that will render the HVAC system visibly clean and capable of passing cleaning verification methods consistent with National Air Duct Cleaning Association (NADCA) Standards and other specified tests using dry decontamination methods. The dry decontamination methods will effectively remove accumulated deposits without using organic or aqueous solvents, which could leave unpleasant or irritating odors and cause undue concern regarding indoor air quality.

6.0 PROJECT MONITORING

AMC will provide competent experienced project monitors to inspect and monitor the work. The focus of the monitoring will be to provide current information utilizing a combination of real-time monitoring of dust and pressure differential measurements, and off-site laboratory analysis that will enable the AMC project monitor to audit contractor performance and provide an initial assessment of cleaned areas. The AMC project monitor will also collect field measurements and/or samples before reactivating the ventilation system.

AMC assumes 40 PCB Aroclor wipe samples (plus QC) to verify dust removal performance in ducts and in accessible areas of visible dust accumulation (note that the selected contractor will also be required to demonstrate conformance to the specifications through wipe and other sampling). AMC assumes the wipe samples will be analyzed under the laboratory's standard 2-week turnaround to avoid rush analysis surcharges. Budget is also included for field instrumentation (e.g. dust monitors, velometers, etc.).

7.0 VERIFICATION AND OTHER SAMPLING

Verification. AMC's specification clearly states that the Contractor shall verify system cleanliness through Surface Comparison Testing or the NADCA vacuum test specified in the NADCA standards. All cleaned surfaces must have PCB levels that are <1 micrograms/100 square centimeters (1 ug/100 cm²). NADCA vacuum test and wipe sampling will be performed by AMC after the Contractor has determined that they have completed the cleaning.

AMC assumes 40 PCB Aroclor wipe samples (plus QC) to verify dust removal performance in ducts and in accessible areas of visible dust accumulation. AMC assumes the wipe samples will be analyzed under the laboratory's standard 2-week turnaround to avoid rush analysis surcharges. Budget is also included for field instrumentation (e.g. dust monitors, velometers, etc.).

Indoor Air Sampling. At the conclusion of dust and accumulated accessible visible dust removal by the qualified contractor, AMC will conduct one round of 24 hour air monitoring for PCB Homologues at the same xx indoor locations (and 2 exterior background locations) sampled by AMC at SCHOOL on DATE following the DATE AMC prepared and EPA-approved plan.

Supplemental Diagnostic PCB Source Sampling. AMC will conduct additional bulk and wipe sampling in the xx classrooms with the highest concentrations of indoor air PCBs (i.e. ROOM #'S) to clarify the relative contributions of potential PCB sources in these locations, with potential application to targeting PCB remedial actions of bulk materials to the rest of the school. For budgetary purposes, AMC assumes the collection of x wipes and x bulk samples (plus QC) from each room for PCB Aroclors.

8.0 ESTIMATED WASTE VOLUME, WASTE MANAGEMENT AND WASTE DISPOSAL

Estimated Waste Volume. AMC estimates that less than 10 tons of contaminated dust, debris, personnel protective equipment (PPE), and materials used in decontaminating air-handling ducts.

Waste Management. Waste materials and PPE will be stored on-site in Department of Transportation (DOT) approved containers, or equivalent and be appropriately labeled. AMC will work closely with the BOARD OF ED to assign an appropriate, secure accumulation area either on the SCHOOL campus or at a nearby City owned facility. All PPE will be removed in an area designed for personnel decontamination.

Waste Disposal. Waste materials generated by this project are proposed to be disposed of at the LANDFILL located at ADDRESS in CITY, STATE.

9.0 NOTIFICATION, REPORT AND PUBLIC PRESENTATION

AMC will provide written notification to federal, state and local authorities prior to initiating remedial activities.

AMC will prepare a written report suitable for posting on the City's website documenting the results of the ventilation and accumulated accessible dust removal, post-removal air sampling and supplementary PCB diagnostic source sampling. AMC assumes presentation of the results (PowerPoint) at one public meeting. The PowerPoint slides will also be suitable for posting on the website.

10.0 PERSON RESPONSIBLE FOR CONDUCTING THE REMEDIATION

The proposed cleaning of air handling systems, duct work and surfaces at SCHOOL will be conducted under the direction and supervision of the following:

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APPENDIX A
REPORT OF FINDINGS